

## **For Information**

### **Legislative Council Panel on Environmental Affairs**

#### **Implementation Arrangements for Municipal Solid Waste Charging**

In response to the issues raised by the Panel on Environmental Affairs at its meeting held on 29 May 2017, this note provides supplementary information on the Administration's proposed implementation arrangements for municipal solid waste ("MSW") charging.

*(a) Measures taken or to be taken on promoting and implementing food waste recycling*

"A Food Waste & Yard Waste Plan for Hong Kong 2014-2022"

2. The Government published "A Food Waste & Yard Waste Plan for Hong Kong 2014-2022" ("the Food Waste Plan") in 2014, which analyses the current situation of food waste and yard waste in Hong Kong and sets the target of reducing food waste disposal at landfills by 40% by 2022. The Food Waste Plan also sets out clear directions and comprehensive strategies for the reduction, recovery and recycling of food waste, including reduction at source, food donation, food waste collection and recycling, and turning food waste into energy.

Development of the Network of Organic Resources Recovery Centres

3. An important strategy under the Food Waste Plan is to build a network of around five to six Organic Resources Recovery Centres ("ORRCs"), which recycle food waste into renewable energy (electricity or biogas) and compost by advanced technology. The total recycling capacity will be about 1 300 - 1 500 tonnes per day ("tpd").

4. ORRC Phases 1 and 2 that are situated at Siu Ho Wan of North Lantau and Sha Ling of the North District respectively are scheduled for commissioning by end of this year and 2021. The facilities can as a whole process 500 tpd source-separated food waste from the commercial and industrial (“C&I”) sectors. A site in Shek Kong has been earmarked for the development of ORRC Phase 3, and the concerned Engineering Feasibility Study and Environmental Impact Assessment will be commissioned. The Environmental Protection Department (“EPD”) will continue to work with relevant departments in searching for suitable sites for the remaining ORRCs, and keep an open mind regarding the locations and development/operation modes of the future ORRCs.

#### Other Food Waste Reduction and Recycling Initiatives

5. To better prepare the community for large-scale food waste recycling in future, the Government has, in accordance with the Food Waste Plan, rolled out various schemes which aim to raise public awareness of food waste reduction and promote the practice of food waste source separation, with a view to facilitating collection and recycling in future -

- (i) “The Food Wise Hong Kong Campaign (“FWHKC”): Launched in May 2013, it is a territory-wide food waste reduction campaign which aims to promote public awareness of the problem of food waste and encourage behavioural changes in different sectors, including the C&I and domestic sectors. The terms of reference and membership of FWHK Steering Committee have been just updated to cope with the new era of encouraging and facilitating on-site and/or off-site recycling of the unavoidable food waste. As at June 2017, about 670 establishments have signed “the Food Wise Charter” to show their commitment to food waste reduction. The Government will continue to encourage more local businesses and establishments to sign “the Food Wise Charter”. EPD has also organised training workshops and provided good practice guides to the food and beverage (“F&B”) sector and other sectors on practical

advice and to share practical experience in food waste avoidance and reduction. To further reduce food waste generation and disposal, EPD launched a “Food Wise Eateries” Scheme promoting food waste avoidance and reduction in November 2015 to encourage the F&B sector to offer portioned meals so that customers may make order according to their appetite. Currently, about 970 eatery outlets have enrolled in the scheme. In addition, the “Big Waster” who symbolises food wastage in the FWHKC has strengthened interaction with supporters (in particular the youth) through his Facebook, on which information of food waste reduction is also provided.

- (ii) Food Donation: As at June 2017, the Environment and Conservation Fund (“ECF”) has approved about \$39 million for 24 projects, which recovered about 2 800 tonnes of surplus food for redistribution to some 2.3 million headcounts.
- (iii) “Food Waste Recycling in Housing Estates”: As at June 2017, the funding applications from 32 housing estates for about \$32 million have been approved by the ECF to support food waste reduction and on-site recycling in private housing estates. About 3 800 households from the approved housing estates have registered under the projects to process the source-separated food waste through the on-site food waste treatment facilities. In addition, the relevant educational and publicity activities of the above projects can help disseminate the waste reduction message to about 67 000 participating households.
- (iv) The Government announced in the Policy Address this year that support for on-site treatment of food waste will be provided for organisations including tertiary institutions, primary and secondary schools, etc. with a view to enhancing the awareness of a “food wise” culture

among students and teachers.

- (v) The Government commenced in March 2017 a feasibility study on organic waste collection and delivery to ORRCs to review the current arrangements for collection and delivery of organic waste generated from Government organisations, C&I establishments and households; and to work out a feasible and effective proposal for collection and delivery of organic waste taking into account the actual situation of Hong Kong. The study is expected to be completed by 2018.

6. The Government announced in the Policy Address this year to further encourage the C&I sector to recycle and handle food waste properly. EPD has set up an inter-departmental working group to explore suitable arrangements and to implement a pilot project to collect source-separated C&I food waste from wet markets, cooked food centres and shopping malls managed by the Food and Environmental Hygiene Department (“FEHD”) and the Hong Kong Housing Authority/Housing Department, for delivery to the ORRC which is about to be commissioned for treatment. In addition, making reference to the experience in other cities, EPD will kick start a study on the feasibility, options and legislative proposals for implementing a mandatory food waste source separation scheme in Hong Kong.

- (b) *Possible difficulties encountered in taking enforcement actions in future against non-compliances with the requirements under municipal solid waste ("MSW") charging, and relevant enforcement measures to be taken by the Administration to overcome those difficulties; and*

7. The enforcement work of MSW charging under planning involves two tiers. First, frontline staff of FEHD will conduct cursory screening and reject waste not properly wrapped in designated garbage bags or not affixed with oversized waste labels at its/its contractors’ refuse collection vehicles (“RCVs”) and refuse collection points (“RCPs”). Enforcement staff will also conduct ambush operation at these RCVs and RCPs as

necessary. EPD will be responsible for handling complaints on non-compliance cases at waste collection points inside buildings. Due to privacy and resource considerations, EPD will draw up a list of “black spots” through intelligence and complaints received, and focus on enforcement work at those black spots identified. Fixed penalty notices at \$1,500 each will be issued to offenders intercepted on the spot, and prosecution by way of summons will be taken against serious or repeated offenders.

8. We expect that there would be challenges for enforcement on different fronts. Firstly, Hong Kong is characterised by its dense population and the predominance of high-rise buildings. As the act of waste disposal takes place very quickly, it will pose challenges for enforcement staff to intercept offenders on the spot for prosecution. Besides, as MSW charging will be implemented in all sectors simultaneously, enforcement staff will have to patrol and take actions at a large number of waste reception points which scatter over different premises across the territory. During the initial period of implementation, the community may not yet get accustomed to the arrangements, giving rise to non-compliance of the MSW charging, which will pose great challenges for the enforcement staff.

9. Drawing on the successful experience of the Environmental Levy Scheme on Plastic Shopping Bags, we intend to put in place a six months’ phasing-in period after the commencement of MSW charging. During this period, frontline staff of FEHD will conduct cursory visual screening to see if the waste handed over to them has been properly wrapped in designated garbage bags or attached with oversized waste labels, and will reject any non-compliant waste. Warnings will be issued in non-compliant cases by enforcement staff of EPD and FEHD and enforcement actions will be taken in case the nature and magnitude of the offence calls for enforcement, e.g. if the offender repeatedly contravenes the law despite warnings given. This arrangement will allow the community to get accustomed to the requirements in the initial period and to cater for the need of some waste producers who may need a bit more time to gradually change their behaviour. EPD will be doing the same in respect of waste collection points inside buildings.

10. Meanwhile, there are currently about 4 000 residential buildings which are equipped with refuse chutes in Hong Kong. It will be difficult to monitor the compliance of individual households and achieve the polluter-pay principle if they can dispose of their waste freely through these refuse chutes after the implementation of MSW charging. In this respect, we have conducted a survey to understand the situation. The result shows that refuse chutes in many residential buildings are already locked on safety and hygiene considerations and are used by the cleaning workers only. We will develop good practice guides for reference by the property management sector and include the suggestion for the property management companies (“PMCs”) to restrict the use of refuse chutes by cleaning workers only, and for the cleaning workers to screen the waste before disposing them into the refuse chutes, etc..

11. At present, households residing in rural areas generally dispose of their waste at the RCPs and bin sites of FEHD. As almost all of these RCPs and bin sites are unmanned, they will pose challenges for enforcement. In this respect, we will actively explore with relevant stakeholders (including the Heung Yee Kuk (“HYK”) and village representatives) on how to effectively implement MSW charging in rural areas, and strengthen ambush operation at the black spots identified.

12. Making reference to the experience in Taipei City and Seoul, we cannot rely on enforcement alone to ensure compliance. Instead, promotion and public education to enhance the awareness of the community in environmental protection and in complying with relevant legislation holds the key to the successful implementation of waste charging. As such, we will adopt the slogan of “Dump Less, Save More” and launch major public education and publicity campaigns. EPD is also considering to set up its own outreaching teams, to help step up our education efforts on the spot and render outreach service and assistance to the PMCs and residents to practise proper waste source separation and clean recycling through regular site visits. These teams would strive to establish and maintain a direct and effective liaison network with the PMCs and residents, monitor the waste separation and clean recycling work and offer practical tips to enhance such practices including funding sources for recycling programmes, and provide suitable assistance in identifying suitable and proper recycling outlets. We will

also continue to collaborate with different stakeholders, including green groups, PMCs and the HYK, etc., in rolling out relevant education and publicity campaigns.

13. In addition, the ECF has earmarked \$50 million since 2015 for funding community involvement projects to prepare different sectors and stakeholders for the implementation of MSW charging. More than 30 community involvement projects with a total funding of \$33 million have been approved so far. Their experience gained from the trial projects in actual settings will provide useful references in implementing the charging scheme in future. We will refine the relevant implementation guidelines making reference to their experience and arrange sharing sessions for the project proponents to share their experience with relevant stakeholders.

**(c) *The report and findings on the pilot scheme on MSW charging conducted by the Environmental Protection Department in 2014.***

14. EPD conducted a Pilot Scheme on MSW charging in seven housing estates (including Amoy Gardens, Chai Wan Estate, Chun Seen Mei Chuen, Island Resort, Kwong Tin Estate, Tak Tin Estate and the Orchards) in 2014 with a view to attaining a better understanding of the operational arrangements of the three different modes of quantity-based waste charging (i.e. “charging by the weight of waste disposed of by the building”, “charging by the volume of waste disposed of by the building” and “charging by household using designated garbage bags”).

15. The Pilot Scheme lasted for around six months and the overall result was as follows –

- (i) the amount of waste disposed of by different housing estates varied, and was affected by different circumstances and practices of the households involved. The amount of waste disposed of had generally decreased as a result of enhanced publicity and public education which had been organised under the Pilot

Scheme;

- (ii) according to the feedback from different stakeholders, the Government should, irrespective of the charging mode to be adopted, enhance recycling support and publicity and public education efforts. Enforcement should also be strengthened as appropriate when the MSW charging was formally implemented so as to deter evasion of charges and maintain environmental hygiene; and
- (iii) stakeholders considered that “charging by household using designated garbage bags” could better realise the principle of equality and provide a stronger incentive to reduce waste. However, it required more resources and support by households.

16. As the detailed arrangements of MSW charging further develop, the ECF has, as mentioned in paragraph 13 above, earmarked \$50 million since 2015 for funding community involvement projects, with a view to better preparing different sectors and stakeholders for the implementation of MSW charging.

**Environment Bureau/ Environmental Protection Department  
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